

FEDERAL AVIATION AGENCY

Washington 25, D. C.

TECHNICAL STANDARD ORDER

Regulations of the Administrator

Part 514

SUBJECT: AIRCRAFT HEADSETS AND SPEAKERS

TSO-C57

Technical Standard Orders for Aircraft Materials,
Parts, Processes, and Appliances

Part 514 contains minimum performance standards and specifications of materials, parts, processes, and appliances used in aircraft and implements the provisions of sections 3.18, 4a.31, 4b.18, 6.18, and 7.18 of the Civil Air Regulations. The regulation uses the Technical Standard Order system which, in brief, provides for FAA-industry cooperation in the development of performance standards and specifications which are adopted by the Administrator as Technical Standard Orders, and a form of self-regulation by industry in demonstrating compliance with these orders.

Part 514 consists of two subparts. Subpart A contains the general requirements applicable to all Technical Standard Orders. These provisions are summarized below for the convenient reference of the public. Subpart B contains the technical standards and specifications to which a particular product must conform, and each Technical Standard Order is set forth in the appropriate section of Subpart B. The subject Technical Standard Order is printed below. ANY TECHNICAL STANDARD ORDER MAY BE OBTAINED BY SENDING A REQUEST TO FAA, WASHINGTON 25, D. C.

SUBPART A--GENERAL

This subpart provides, in part, that a manufacturer of an aircraft material, part, process, or appliance for which standards are established in Subpart B, prior to its distribution for use on a civil aircraft of the United States, shall furnish a written statement of conformance certifying that the material, part, process, or appliance meets the applicable performance standards established in this part. The statement of conformance must be signed by a person duly authorized by the manufacturer, and furnished to the Chief, Engineering and Manufacturing Division, Bureau of Flight Standards, Federal Aviation Agency, Washington 25, D. C.

Subpart A also requires appropriate marking of materials, parts, processes, and appliances as follows:

- (a) Name and address of the manufacturer responsible for compliance,
- (b) Equipment name, or type or model designation,
- (c) Weight to the nearest pound and fraction thereof,
- (d) Serial number and/or date of manufacture, and
- (e) Applicable Technical Standard Order (TSO) number.

In addition, Subpart A provides that no deviation will be granted from the performance standards established in Subpart B, and that the Administrator may take appropriate action in the event of noncompliance with Part 514.

SUBPART B

§ 514.49 Aircraft audio and interphone amplifiers (for air carrier aircraft) - TSO-C50a--(a) Applicability--(1) Minimum performance standards. Minimum performance standards are hereby established for aircraft audio and interphone amplifiers which are to be used on civil aircraft of the United States engaged in air carrier operation. New models of aircraft audio and interphone amplifiers manufactured for use on civil air carrier aircraft on or after September 1, 1959, shall meet the minimum performance standards as set forth in Radio Technical Commission for Aeronautics' Paper entitled "Minimum Performance Standards Aircraft Audio and Interphone Amplifiers," as amended, (Paper 45-57/DO-78 dated March 15, 1957, and amendment, Paper 255-58/EC-365 dated November 13, 1958).^{1/} Radio Technical Commission for Aeronautics' Paper 100-54/DO-60^{1/} which is incorporated in by reference and thus is a part of Paper 45-57/DO-78 has been amended by Paper 256-58/EC-366 dated November 13, 1958. This amendment is also a part of the minimum performance standards. An exception to these standards is covered in subparagraph (2) of this paragraph.

(2) Exception. Radio Technical Commission for Aeronautics' Paper 100-54/DO-60, and amendment Paper 256-58/EC-366 dated November 13, 1958, outline environmental test procedures for equipment designed to operate under three environmental test conditions as specified therein under Procedures A, B, and C. Only aircraft audio and interphone amplifiers which meet the operating requirements as outlined under Procedure A or Procedure B of Paper 100-54/DO-60, as amended, are eligible under this section.

(b) Marking. In addition to the information required in Subpart A, equipment which has been designed to operate over the environmental conditions as outlined in Procedure A of RTCA Paper 100-54/DO-60, as amended, shall be marked as Category A equipment. Equipment which has been designed to operate over the environmental conditions outlined in Procedure B of this same paper shall be marked as Category B equipment.

(c) Data requirements. One copy each of the manufacturer's operating instructions, schematic diagrams, and installation procedures shall be furnished the Chief, Engineering and Manufacturing Division, Federal Aviation Agency, Washington 25, D. C., with the statement of conformance.

(d) Previously approved equipment. Airborne audio and interphone amplifiers approved prior to September 1, 1959, may continue to be manufactured under the provisions of their original approval.

(e) Effective date. September 1, 1959.

^{1/}Copies of these papers may be obtained from the RTCA Secretariat, Room 1072, T-5 Building, 16th and Constitution Ave., N. W., Washington 25, D. C. Paper 45-57/DO-78, 25 cents per copy; Paper 100-54/DO-60, 20 cents per copy.